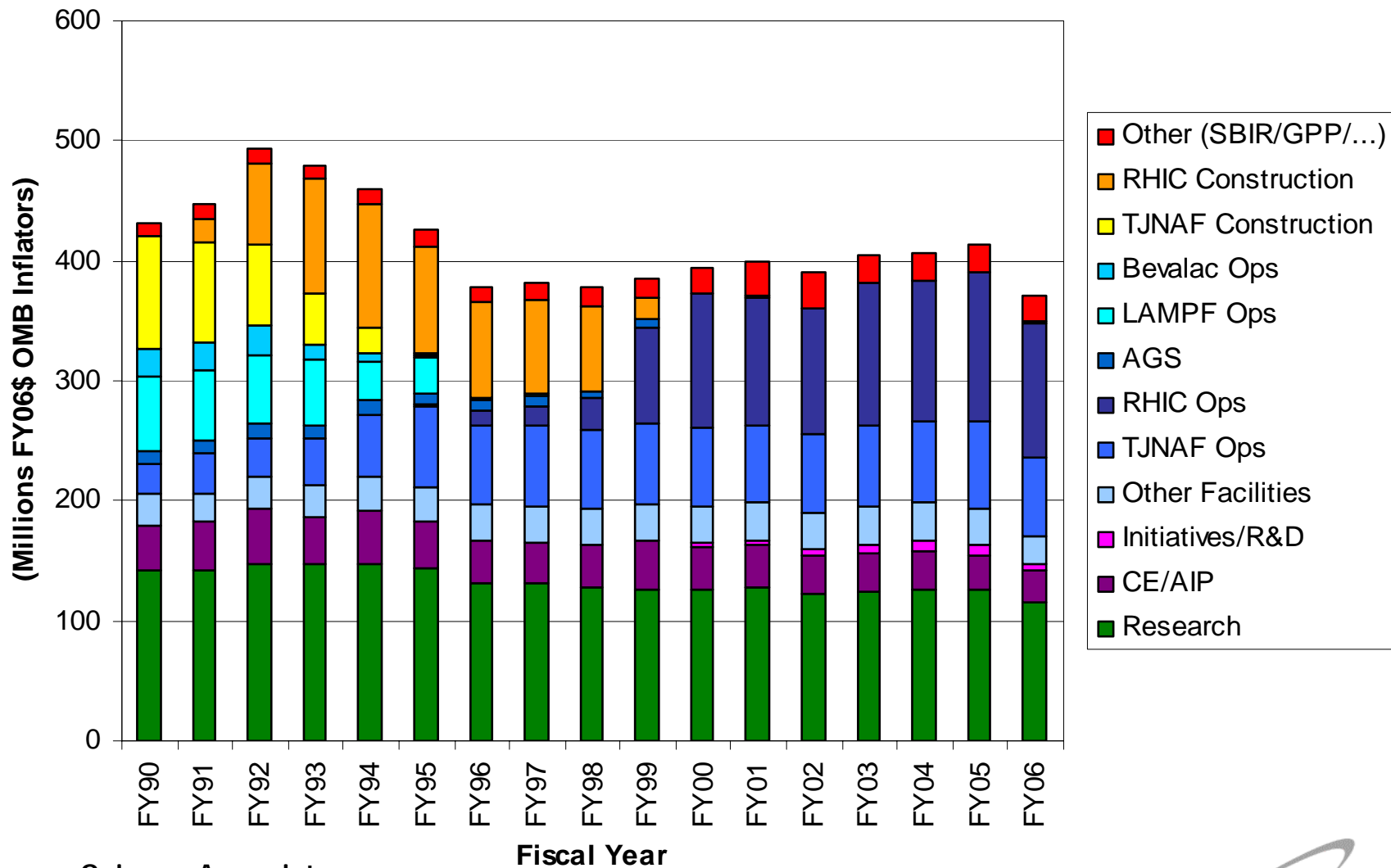

HENP outlook at BNL and CA-D

P. D. Bond
CA-D retreat
6/15/2005

Nuclear Physics Funding History



Short term outlook in NP

- FY06 Presidential budget terrible with projections even worse
 - Prompted an NSAC subcommittee to evaluate possible closure of RHIC or CEBAFs as they total about $\frac{1}{2}$ of NP budget
 - Draft report is out - NSAC working on it today
 - RHIC has been given preference under budget disasters
- House has corrected the RHIC funding
- Senate markup 6/14 has RHIC budget consistent with the House
- No guarantee but cautious optimism for the near term

NSAC subcommittee DRAFT

- No scientific justification for closure of either RHIC or CEBAF and far-reaching consequences for loss of U.S. leadership
- Near term - capitalize on RHIC/CEBAF
 - The cost of operating RHIC is an issue
- Relatively small increase in funding would solve a lot of issues

NSAC subcommittee DRAFT (cont)

- Many budget scenarios considered
 - Argue strongly against the worst one, not just for science but also for training the next generation of people in areas requiring nuclear expertise
- Worst case scenario - split decision
 - “subcommittee ...has a slight preference for the choice that maintains operations at RHIC.” If similar budget exercise were to occur later with the 12-GeV upgrade ongoing “a different choice might well be made”
- Important to work to to assure budget OK

Longer term NP budget outlook

- DOE 20 year plan has a number of BNL projects, although timing not optimum
 - E.g. – RIA and 12 GeV upgrade are positioned before RHIC II and eRHIC
 - Out-year scenarios shown to NSAC subcommittee by DOE look more encouraging for RHICII+eRHIC
- Success depends upon many forces, but especially the new DOE secretary
 - FY07 budget will be the first sign as to priorities
- Flat-flat from FY06 would be a catastrophe for everyone – are working to make sure it does not happen

BNL NP priorities and challenges

- EBIS funding looks good
 - CD1 baseline review in July
- e-cooling R&D getting funding from a variety of sources
- What was called RHIC II and eRHIC have some major hurdles
 - Convince the community and NSAC LRP of science
 - Establish relative priority of RIA and CEBAF 12-GeV
 - Funding
- Great opportunity, but will require a lot of work on many fronts

HEP at BNL near term future

■ Lots of “ifs” for CA-D specific

- RSVP funding in limbo until August (at least)
 - Very strong science case
- g-2 awaits P5
 - P5 has higher priorities (Tevatron vs. B-factory), will not get to g-2 this year
- Neutrinos await priority and competition from FNAL
 - Strong science case and BNL the right design

■ DOE program currently focused on LHC, FNAL, SLAC and hope for ILC

Other sources of funding

- NASA looks solid for the moment with possible real growth
- Navy funding some of the FEL work also with possible real growth
- Could probably get larger DOD funding. Navy has agreed not to classify effort.

Bottom Line

- A lot of exciting potential, but some bumps in the road with funding
- CA-D performance with RHIC has been outstanding – important to keep it up, recognize the funding issues, try to increase efficiencies (cost) to enhance probability of new projects